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| <p>2002-548770/59 H04 CHPE- 1996.11.15<br/>         CHINA PETRO-CHEM CORP *CN 1182732-A<br/>         1996.11.15 1996-120492(+1996CN-120492) (1998.05.27) C07C<br/>         31/20, B01J 23/86, C07C 29/149<br/> <b>1,4-butanediol production by gas phase hydrogenation</b><br/> <b>C2002-155570</b><br/>         Addnl. Data: WANG H, FENG W, TONG L</p>   | <p>H(4-E8, 4-F2E)</p> |
| <p><b>NOVELTY</b><br/>         Preparing 1,4-butanediol by gas-phase hydrogenation of cis-butenedioic anhydride and/or its ester includes gasification of cis-butenedioic anhydride or its ester; then under 200-250°C and 3.0-7.0 MPa and in the presence of a catalyst which is pre-reduced and comprises <math>\text{CuCr}_x\text{A}_b\text{O}_x</math> carrying out hydrogenation to obtain 1,4-butanediol. A = aluminum or titanium; a = 0.5-1.5; b = 0.01-0.7; and X = the number of oxygen atoms for meeting the chemical valence of various metal elements.</p> <p><b>ADVANTAGE</b><br/>         The process causes the raw material anhydride to implement conversion, and the selectivity of 1,4-butanediol is 20-90 mole%. (1ppDwgNo.0/0)</p> | <p>CN 1182732-A</p>   |